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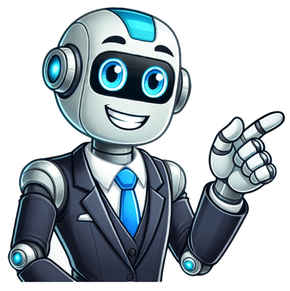

Hires Large Default Tablet Portait Handheld Landscape Handheld Portait The Positive and Negative Syndrome Scale (PANSS) is one of the most widely used measures of psychopathology of schizophrenia in clinical research. Since its development, the PANSS has become a benchmark when screening and assessing change, in both clinical and research patients. It is a 30-item scale used to evaluate the presence, absence and severity of Positive, Negative and General Psychopathology symptoms of schizophrenia. The 30 items are arranged as seven positive symptom subscale items, seven negative symptom subscale items, and 16 general psychopathology symptom items. Each item has a definition and a basis for rating. All 30 items are rated on a 7-point scale (1 = absent; 7 = extreme). The strengths of the PANSS include its structured interview, robust factor dimensions, reliability, the availability of detailed anchor points, and validity. The PANSS is accompanied by a semi-structured interview, the SCI-PANSS, to ensure that all content domains are covered during the interview session. The Structured Clinical Interview for Symptoms of Remission for the PANSS (SCI-SR) is a brief interview that may be used in research and treatment settings to assess remission based on eight PANSS items. Informant data is required to confirm functional status on 4 of the 8 items. This data may be collected from third party sources (nursing staff, families, caregivers) or provided by the clinician conducting the interview (assuming sufficient patient contact has occurred in the prior period of interest). Each item is rated using the well-validated criteria and anchoring points for each as described in the PANSS Manual. Unlike the SCI-PANSS, the SCI-SR may be administered in approximately 15 minutes or less. Based on Andreasen et al. (2005), remission is defined as a score of 3 (Mild) or less for each item, maintained over 6 month period. The Symptoms of Trauma Scale (SOTS) is a 9-item 7-point rating scale that can be used to measure severity, ranging from absent to extreme, of nine symptoms previously shown to be associated with trauma. Since the SOTS is not a diagnostic interview, it cannot be used to establish a diagnosis of Post-traumatic Stress Disorder (PTSD) and/or Complex PTSD. Rather, the SOTS it is designed to be used to complement existing systems that establish trauma history as well as diagnosis. Ratings for nine symptoms range from: 1=Absent to 7=Extreme. Because the SOTS provides a means of rating of symptoms at seven levels of severity (absent, minimal, mild, moderate, moderate severe, severe, and extreme), the SOTS can assess changes in trauma symptoms. This will become increasingly important as new treatments, both psychosocial and pharmacological, emerge to treat PTSD and other trauma related disorders. The Symptom Specific Group Therapy, or SSGT is a set of six manuals designed by Dr. Anne-Marie Shelley. Each manual focuses on one symptom category of schizophrenia, including Positive symptoms, Negative symptoms, Trauma symptoms, Activation symptoms, Dysphoria, and Autistic Preoccupation. Each manual is intended to guide a group leader and/or co-leader in conducting group cognitive behavioral therapy sessions for patients who exemplify the specific symptoms for that groups symptom module. Each group is intended to last approximately 12 weeks (based on group meetings once a week), and involved both interactive and teaching components. The SSGT-based program is currently being utilized at the Bronx Psychiatric Center, and is quickly gaining momentum in the realm of cognitive behavioral therapy nationwide. DiagnosisRule OutPrognosisFormulaTreatmentAlgorithm[fstyle][/fstyle]Hello there, folks! Have you ever tried to understand the nitty-gritty of the PANSS calculation formula? No, its not about doing a salsa dance with your pants on, but rather, its a critical measure used in the world of psychiatry. But lets dive in, shall we? PANSS Calculation FormulaThe PANSS calculation formula is derived by adding up the scores from each of three scales: positive scale, negative scale, and general psychopathology scale. Each item on these scales is rated from 1 (absent) to 7 (extreme).Total PANSS Score = Positive Scale Score + Negative Scale Score + General Psychopathology Scale ScorePANSS CategoriesCategoryScore RangeInterpretationAbsent1No psychopathological signsMinimal2Psychopathology barely noticeableMild3Psychopathology present but not pronouncedModerate4Psychopathology clearly evidentSevere5Psychopathology strongly pronouncedExtreme6Psychopathology overpoweringPANSS Calculation ExamplesNamePositive Scale ScoreNegative Scale ScoreGeneral Psychopathology Scale ScoreTotal PANSS ScoreInterpretationJohn12102042MildLisa20153065ModerateBob30204090SeverePANSS Calculation MethodsMethodAdvantagesDisadvantagesAccuracy LevelDirect ObservationHigh accuracyTime-consumingHighInterviewsComprehensiveMay be biasedModerateSelf-reportFastLess reliableLowEvolution of PANSS CalculationYearChanges in PANSS Calculation1987Initial introduction of PANSS1990Addition of General Psychopathology Scale2000Introduction of PANSS-62010Development of simplified PANSS versionsLimitations of PANSS Calculation AccuracySubjectivity: The scores might be influenced by the subjective judgment of the rater.Bias: The self-reported scores may contain biases.Lack of specificity: The items in the scale are broad and encompass multiple symptoms.Alternative Methods for Measuring PANSSMethodProsConsBPRSShorter and easier to administerLess comprehensiveCGISimple and fastLess detailedFAQs on PANSS Calculator and PANSS calculationsWhat is the PANSS Calculator? The PANSS Calculator is a tool used to calculate the severity of symptoms in individuals with schizophrenia.How accurate is the PANSS calculation? The accuracy of PANSS calculation depends on various factors such as the method of assessment and the individuals responses.Can the PANSS calculation be used for other disorders? The PANSS calculation is specifically designed for schizophrenia and is not typically used for other disorders.How often should the PANSS calculation be performed? The frequency of PANSS calculation depends on the individuals condition and the clinicians judgment.Can I perform the PANSS calculation on my own? It is recommended that the PANSS calculation be performed by trained professionals.What are the scales included in the PANSS calculation? The PANSS calculation includes the positive scale, the negative scale, and the general psychopathology scale.How is the total PANSS score calculated? The total PANSS score is the sum of the scores from the three scales.What does a higher PANSS score indicate? A higher PANSS score indicates more severe symptoms of schizophrenia.What does a lower PANSS score indicate? A lower PANSS score indicates less severe symptoms of schizophrenia.Is there an online PANSS calculator available? Yes, there are several online resources available for calculating the PANSS score.References As a library, NLM provides access to scientific literature. Inclusion in an NLM database does not imply endorsement of, or agreement with, the contents by NLM or the National Institutes of Health. Learn more: PMC Disclaimer | PMC Copyright Notice . 2017 Nov-Dec;14(11-12):7781.Rater training and the maintenance of the consistency of ratings are critical to ensuring reliability of study measures and sensitivity to changes in the course of a clinical trial. The Positive and Negative Syndrome Scale (PANSS) has been widely used in clinical trials of schizophrenia and other disorders and is considered the gold standard for assessment of antipsychotic treatment efficacy. The various features associated with training and calibration of this scale are complex, reflecting the intricacy and heterogeneity of the disorders that the PANSS is used to evaluate. In this article, the authors review the methods for ensuring reliability of the PANSS as well as a proposed trajectory for its use in the future. An overview of the current principles, implementation, technologies, and strategies for the best use of the PANSS; tips for how to achieve consistency among raters; and optimal training practices of this instrument are presented.Keywords: Positive and Negative Syndrome Scale, PANSS, rater, rater training, technology, clinical trialsRater training helps to ensure reliability in measurement throughout the course of a clinical trial. Precision in the use of a rating scale is important primarily because statistical power to detect differences between treatment groups increases proportionally to inter-rater reliability. A related secondary objective is to ensure that when scale items or subscale score thresholds are being incorporated as inclusion criteria, all raters in a study can reliably classify subjects. Rater training further enhances precision by standardizing interview procedures and codifying the principles of use for a given scale across raters, sites, and regions.1The Positive and Negative Syndrome Scale (PANSS) has several complex features and requires a thorough and structured approach to rater training.1 Compared with rating scales developed for other disorders, the PANSS has many items, evaluates a multidimensional array of symptoms (e.g. positive, negative, neuromotor, depressive), and involves the use of data from patient reports, caregiver reports, and clinical observations. Consequently, the PANSS takes up more time during training and requires a greater amount of time for one to master it compared to many other instruments.As described in the original 1987 publication,2 each PANSS item contains three elements that must be used correctly in order to ensure that reliability and validity are maintained:1 1) The item definition describes the construct under evaluation; 2) Each item contains a detailed description of the basis for rating that indicates the sources of information intended to be used for each item. These sources include observations made during the interview, the patient verbal report, and/or corroborative information obtained from caregivers about symptoms and behaviors during the reference period prior to the assessment; and 3) Each item includes a set of carefully written anchors for each level of severity, from 1 (absent) to 7 (extreme).Several approaches to the use of the PANSS might help raters and those leading training programs to achieve a high degree of reliability. Four core principles, summarized here, are taken from publications and lectures given by Dr. Lewis Opler over the course of many years. We summarize them briefly here so as to provide guidance to individual raters and those persons implementing training programs to improve reliability.First principleRead each item definition and all anchor points carefully and interpret each element as literally as possible. The process of rating PANSS items requires a very close reading of each required element. The item definition needs to be considered first to determine whether the item is applicable. If not, a score of 1 (absent) should be assigned. Any evidence suggesting the item is present should prompt a score of 2 (minimal) or higher. Particularly when determining the highest score that applies (see below), efforts should be made to not reinterpret the wording, and impressionistic scoring should be avoided. Terms involving and or and/or should be closely attended so as to ensure that all necessary elements are present before assigning or eliminating a score from consideration.Second principleAlways give the highest rating that applies. Very often, raters are faced with ambiguity. It might be that the answers to queries are unclear or that the information available suggests that more than one score may be applicable. A simple solutionand a convention frequently applied for other instrumentsis to rate up when more than one score might be applicable. For the PANSS, a somewhat different approach is mandated, and instead of arbitrarily moving to select a score, raters should instead always give the highest score that applies based on the available information. For example, if a patient clearly meets the criteria for a score of 3 (mild) and also for 4 (moderate) on any item, as long as all the necessary criteria for both items are met, then the patient should receive a score of 4 (moderate). In the same vein, if a patient almost meets the criteria for a score of 4 (moderate), but is clearly missing some key component, then a score of 4 (moderate) cannot be assigned.Third principleAlways consider the reference period and time frame. Some patients are not always clear about the time frame under examination during an assessment. Typically, the PANSS is rated based on a past week reference period (i.e. the ratings are based on the most severe phenomenon for a given item in the past week). It is worth noting, however, that certain items based solely on nonverbal symptoms during the interview, such as Item N1 (blunted effect), will be rated based on the presentation the rater can observe during the interview. Patients might describe a wide range of experiences during the course of an assessmentincluding some that occurred more than one week ago. While that might reveal beliefs or ideation that is, effectively, still present, many time-delimited phenomena might not be impacted. For example, Item P7 (hostility) would not be directly impacted by a fight that the patient had four weeks ago when using the standard past week reference period.Fourth principleUse all available information for rating, as long as it meets the basis for rating. Instruments developed for other disorders sometimes assume a linear progression with discrete sections compartmentalized by scale item. While the Structured Clinical Interview-PANSS (SCI-PANSS) does have some relatively discrete components, it is more likely that information relevant to rating different items may be presented at any time, possibly even well after the section on an item has been completed. Patients might also give conflicting information at different points during an interview, denying a symptom initially and then endorsing it later. While it is difficult to anticipate every combination of presentations or endorsements, raters should avoid assigning item scores during the interview and should instead wait until the assessment is complete and all necessary information (including informant data) is collected. At the conclusion of the assessment, all information that is relevant and meets the basis for ratings should be taken into account in the final determination.Notably, there are several controversies that have arisen over the years with regard to the proper use of the PANSS. While the following items do not comprise an exhaustive list, they still highlight some of the challenges that raters should consider and develop techniques and strategies to address.Is collateral (informant) information required to rate the PANSS? Two items in the PANSS (N4 and G16) are rated solely on the basis of information meant to be gathered from an informant such as a caregiver or a treating clinician who has had significant contact with the patient during the reference period. It is sometimes challenging to obtain sufficient information to cover all of the required areas, but raters are first instructed to do their best to obtain the necessary information from a third party. In the absence of any available independent person to query, the rater may use records of various sorts in order to gain insight into behaviors during the past week.Is adherence to the SCI-PANSS necessary or is a general clinical psychiatric interview sufficient to obtain information for the purpose of rating? Most clinical trials now mandate the use of the SCI-PANSS. Lindstrom3 and others4 have demonstrated that high reliability can be generated between raters using the SCI-PANSS.1 While the SCI-PANSS could be improved uponand could be in future iterationsit is necessary to have a standardized approach to assessment across visits, patients, and investigators so as to help improve reliability. Additionally, the SCI-PANSS is designed to help ensure that all necessary domains of inquiry are addressed. It is important, however, to remember that the SCI-PANSS is intended to be used as semi-structured interview guidelines rather than a rigidly conducted script. Rewording, rephrasing, and other techniques to help improve patient comprehension can and should be engaged when applicable. Additionally, there might be instances in which it is beneficial to change the order of the questions. For example, a disorganized and challenging patient might spontaneously begin talking about hallucinatory experiences. A rater might then determine that it is clinically advisable to take advantage of the opportunity to explore this symptom further rather than attempting to redirect the interview at that point.Is it necessary to use the anchoring points if the patient is quite severe across an entire domain (e.g. positive symptoms)? Less experienced clinicians and raters are often over-impressed by psychotic symptoms and appear to rely less on the anchor points in these instances. While it is tempting to save time by assigning blanket scores for items impressionistically, such an approach fails to meet the standards for reliable use of the PANSS. Raters are urged to carefully reach each item and assign the highest score that applies on the basis of the written anchors.In cases in which the local definition of an item/concept differs from the one shown in the PANSS rating criteria, may the local alternative be substituted? Different disciplines and fields of study can variably define common concepts (e.g. delusions). In clinical practice, these approaches might have significant value to treatment of patients in a local context; for example, if a culturally influenced explanation of a symptom that is acceptable to the patient and his/her family needs to be explored and acknowledged by the treating clinician to facilitate communication and adherence with treatment, then this is of great value to all stakeholders in that context.5 However, within the confines of a clinical trial, particularly one that is multisite and/or global in nature, the need for standardization across visits, sites, and regions for the purposes of research necessitates that all raters adhere to the common definitions of terms without substitution.Traditionally, rater training for the PANSS involved raters attending an investigator meeting for each clinical trial, where they would sit classroom style, listen to a slide-based lecture, view videotaped interviews, and rate them through an audience response system. Outlying scores were discussed with the goal of optimizing inter-rater reliability. Certification was based on scoring an agreed-upon percentage of items with fidelity to the gold standard. At a mid-study investigator meeting intended to prevent rater drift, raters would review a slide lecture and rate an additional videotaped interview, and were remediated if their scores were outside the gold standard.6Limitations of traditional training. Such methodologies were capable of achieving and maintaining high levels of reliability and have effectively remained unchanged since the original Phase III studies of risperidone in the 1990s.7 However, the limitations of this methodology have become apparent and are as follows: 1) raters working on multiple trials are sometimes subjected to repetitive training that does not take their individual issues in PANSS rating into account; 2) rating a videotaped interview does not address the correct assessment technique and the ability to elicit information from a psychotic patient; 3) training should be relevant and individualized to the specific clinical trial; and 4) a raters behavior in the laboratory of an investigator meeting does not necessarily reflect the raters behavior while at his or her site rating patients.8Interactive training. PANSS training is rapidly evolving to address the above issues. Increasingly, traditional, passive, classroom-style training is being replaced with interactive, case-oriented methods that require active participation from investigators. For example, in the roundtable approach, investigators are organized in small groups, often by site and nationality. Instead of a long repetitive lecture, there is a short review of the basic principles of rating followed by case discussions. Within each group, raters come to a consensus with their colleagues from their sites and countries. This synchronizes a rating methodology within a site and prevents noise in the ratings when raters cross-cover for each other. The session is moderated by an appropriately qualified trainer who is capable of synthesizing the various points of view and who is tasked with ensuring compliance to core principles and gold-standard approaches. There are many variations in this methodology but they share the concepts of active participation and consensus-building to replace passive listening.In the past, the centerpiece of training for both beginner and advanced raters were lengthy, item-by-item ratings of full, unselected PANSS interviews. The current trend for experienced raters is to teach with shorter vignettes targeting relevant areas of study design, such as the population under study (e.g. acutely psychotic, prominent positive symptoms, predominant negative symptoms, stable, treatment resistant), change from baseline, and difficult to rate symptoms.Assessment technique. Interview skill assessment and feedback has become integral to PANSS training and addresses the ability of the rater to probe the population under study sufficiently so as to distinguish among the anchor points of each item in a neutral manner unlikely to induce a placebo response. This is most effective when using highly trained live actors who challenge the investigator with scripted foils.Certification procedures. In the past, certification to administer the PANSS was commonly based on the successful rating of a videotaped PANSS interview. However, this is a passive procedure that fails to assess the investigators ability to deliver a thorough and unbiased interview. It is critical to standardize both the interview technique and measurement skills. A newer procedure for certification is to require candidates to successfully interview and measure the symptom severity of highly synchronized actors portraying patients with psychotic disorders. The use of quantified approaches to the evaluation of interview technique has been linked with data quality and signal separation, making this active evaluation a more relevant and meaningful approach to certification.1Videotaped interviews are more commonly used than actors to evaluate assessment technique and scoring, in part because video recording is more resource-intensive than training and synchronizing actors in multiple languages and bringing them to investigator meetings. For the most part, raters with sufficient credentials and experience administering the PANSS to the population under study are certified if they meet certain standards of accuracy and precision with their measurement of the individual PANSS items and the PANSS total, based on both gold standards and statistical outliers. To accelerate the rater approval process, decisions regarding success or failure of the candidate as well as remediation may be delivered at the investigator meeting. Like any assay, the measurement of psychotic symptoms must be periodically recalibrated. Intra-rater and inter-rater reliability should be assessed and remediated regularly.Technology has provided vibrant, efficient alternatives to expensive, potentially inefficient in-person, multi-country investigator meetings. Initial training, as well as mid-study refresher training, may occur by use of live web conferencing, essentially recapitulating the interaction of an investigator meeting, or in an on-demand manner, either online or application-based.9 Adaptive and risk-based methods may be applied to individualize PANSS training to triage a rater to more basic or advanced nuanced curriculums or to steer the training toward specifc areas for improvement. Avatars can be programmed with decision tree logic to serve as subjects for interview skills training. Virtual reality may be used to create a realistic assessment environment. All these technologies, and more to come, might transform traditional training and make it more useful, practical, and effective in years to come.Use of electronic clinical outcome assessment (eCOA). Another means by which newer technologies can bolster PANSS training and data quality is use of eCOA. Platforms utilizing this methodology can assess ratings for logical inconsistencies among PANSS items and between the PANSS and other scales and alert the investigator before data submission. The investigator has the option to reevaluate their rating or to maintain the original scores. eCOA also permits additional alerts and reminders to be made to the rater. For example, the PANSS rater may be prompted to include informant information when appropriate or to periodically remind the subject of the reference period. Notes to support the choice of anchor point might be required. This technology was positively received by both patients and caregivers, with minimum modification requests.10The capacity for audio/video recording of SCI-PANSS interviews can be embedded in the eCOA platform to facilitate deeper independent review of visits, either through an a priori plan (e.g. evaluation of every raters first assessment) or via a risk-based approach using inconsistencies detected within PANSS data to flag an evaluation for review. Early detection and remediation of these data flaws is critical for study success and to prevent rater drift.11 Continual evaluation of the quality of a sites interviews and ratings and retraining as necessary should continue throughout all phases of the trial, just as any assay would be repeatedly monitored and recalibrated.There have been a number of solutions to managing rater drift during clinical trials. Remote, independent rating,12 smaller trials with more experienced rater cohorts,13 and a number of in-study techniques that utilize the internal logic of instruments like the PANSS have gained attention in the last decade.3,14,15 The latter technique uses algorithms to generate flags for what is often referred to as a risk-based approach to monitoring in-study data. Algorithms can consist of logical binary or factorial relationships between one or more scale items or more sophisticated statistical techniques that leverage large clinical trial datasets with known outcome parameters. For the purposes of this article, we will limit our discussion to the sorts of binary and factorial relationships that exist within the PANSS and how these can be used to generate flags. For example, if a rater scores at the level of 7 on Item P5 (grandiosity) and then scores Item P1 (delusions) at the level of 1, this would generate a flag. This is because at the level of 7 on P5, we expect significant and pervasive grandiose delusions and, if that is the case, then the P1 should receive a similarly severe rating. While this is an extreme example (and usually related to the raters reluctance to double rate the same symptom) it serves to illustrate the essential idea that the instrument relationships themselves can show us where there is a high risk for error. Another illustration comes in the form of the Marder16 five-factor model for the PANSS (though some dispute this factor solution8); in such frameworks, the expected correlations between items that represent factors can be used to detect aberrant presentations and potential risk.5,11 For example, if we think about the negative factor that includes N1 to N4, N6, and G7 and we expect that these will be predictably correlated (within certain severity ranges), we can identify risk when one or more correlation fails to agree with the identified matrix.How are these risks are dealt with? Is it actually rater error that is present? Or is it simply a somewhat unusual patient presentation? Intervention methods differ and depend on who is leading the data-monitoring effort, but if actual rater error is responsible, this is the point at which a targeted training event takes place. It must be emphasized here that an expert clinician with a very clear understanding of the scale and the patient population must complete the training. This in-study targeted training is essential in arresting rater drift and reducing the impact of non-informative data (i.e., data that contribute little to the goal of the study but increase variance and thus the ability to detect the signal where it exists). This method has proved cost-effective, and the targeted nature of intervention requires fewer resources than interval retraining (e.g., training done every 36 months) for the full cohort of raters. More importantly, the reduction in non-informative data can make the difference between a failed or negative trial and one that is positive.Prospective, adequately controlled comparisons of methodologies for rater training or in-study data quality monitoring coupled with remediation are rare because sponsors are reluctant to vary methodologies within a clinical trial. The comparison of methodologies across trials is complicated by multiple uncontrolled differences in trial characteristics. That said, used in parallel, the methodologies are complimentary and can reinforce the four principles critical to obtaining reliable and valid data for the duration of a trial. Although the results must be evaluated carefully, comparisons of inter-rater reliability, nonspecific variance, placebo response, and drug-placebo differences across trials using different methodologies can be informative, if not definitive.15 Newer interview training and scale rule training techniques can be evaluated against in-study metrics based on error rates detected by data analytics as well as via an external expert review of recorded patient interviews. The independent review of patient interviews is highly recommended for all clinical trials. It has been demonstrated that interviews that are recorded and reviewed have PANSS scores that align better with the scale requirements.17PANSS rater training has become a standard component of most clinical trials, but true standardization with respect to the exact approaches, techniques, and standards remains elusive. For clinical trials using the PANSS, it is strongly advised that the training program incorporates the core principles described in this article and advocated by the author of the PANSS. Where possible, we also further recommend the following:1) Favor active learning techniques over passive ones, particularly for experienced clinicians and raters with meaningful prior experience using the PANSS. While some raters have persistent idiosyncrasies in their approaches to the use of the scale, active approaches will be far more effective in highlighting these issues and enabling retention of new concepts and information; 2) evaluations of inter-rater reliability should include a videotaped interview or evaluation of a standardized subject/volunteer; most optimally, certification will involve an assessment of interview technique as well as inter-rater reliability to ensure that all prospective raters are capable of conducting an evaluation that strikes the proper balance of adherence to the interview guide and maintenance of flexibility and clinical research rapport; and lastly 3) following initial training, quality assurance approaches should include ongoing evaluation of data and assessment technique, are employed. Where possible, technology can and should be used to help facilitate these processes. Whether utilizing eCOA to replace paper with electronic forms or driving targeted calibration through an analysis of data in-study, a dynamic approach to ensuring inter-rater reliability will help to guarantee that core principles are applied rigorously throughout the study.1.Sajatovic M, Gaur R, Tatsuoka C, et al. Rater training for a multisite, international clinical trial: What mood symptoms may be most difficult to rate? Psychopharmacol Bull. 2011;44(3):514. [PMC free article] [PubMed] [Google Scholar]2.Kay SR, Fiszbein A, Opler LA. The Positive and Negative Syndrome Scale (PANSS) for schizophrenia. Schizophr Bull. 1987;13(2):261276. doi: 10.1093/schbul/13.2.261. [DOI] [PubMed] [Google Scholar]3.Lindstrm E, Wieselgren IM, von Knorring L. Interrater reliability of the Structured Clinical Interview for the Positive and Negative Syndrome Scale for schizophrenia. Acta Psychiatr Scand. 1994;89(3):192195. doi: 10.1111/j.1600-0447.1994.tb08091.x. 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[PMC free article] [PubMed] [Google Scholar]16.Marder SR, Davis JM, Chouinard G. The effects of risperidone on the five dimensions of schizophrenia derived by factor analysis: combined results of the North American trials. J Clin Psychiatry. 1997;58(12):538546. doi: 10.4088/jcp.v58n1205. [DOI] [PubMed] [Google Scholar]17.Kott A, Daniel DG. Effects of PANSS audio/video recordings on the presence of identical scorings across visits. Eur Neuropsychopharmacol. 2015;25:S543S544. [Google Scholar] Scale for assessing schizophreniaMedical diagnostic methodPositive and Negative Syndrome ScalePurposemeasures severity of individuals with schizophreniaThe Positive and Negative Syndrome Scale (PANSS) is a medical scale used for measuring symptom severity of patients with schizophrenia. It was published in 1987 by Stanley Kay, Lewis Opler, and Abraham Fiszbein. It is widely used in the study of antipsychotic therapy. The scale is the "gold standard" for evaluating the effects of psychopharmacological treatments.[1][2]The name refers to the two types of symptoms in schizophrenia, as defined by the American Psychiatric Association: positive symptoms, which refer to an excess or distortion of normal functions (e.g., hallucinations and delusions), and negative symptoms, which represent a diminution or loss of normal functions. Some of these functions which may be lost include normal thoughts, actions, ability to tell fantasies from reality, and the ability to properly express emotions.[3]The PANSS is a relatively brief interview, requiring 45 to 50 minutes to administer.[4] The interviewer must be trained to a standardized level of reliability.[5]To assess a patient using PANSS, an approximately 45-minute clinical interview is conducted. The patient is rated from 1 to 7 on 30 different symptoms based on the interview as well as reports of family members or primary care hospital workers.[6]7 Items, (minimum score = 7, maximum score = 49)DelusionsConceptual disorganizationHallucinationsExcitementGrandiositySuspiciousness/persecutionHostility7 Items, (minimum score = 7, maximum score = 49)Blunted affectEmotional withdrawalPoor rapportPassive/apathetic social withdrawalDifficulty in abstract thinkingLack of spontaneity and flow of conversationStereotyped thinking16 Items, (minimum score = 16, maximum score = 112)Somatic concernAnxietyGuilt feelingsTensionMannerisms and posturingDepressionMotor retardationUncooperativenessUnusual thought contentDisorientationPoor attentionLack of judgment and insightDisturbance of volitionPoor impulse controlPreoccupationActive social avoidancePANSS Total score minimum = 30, maximum = 210As 1 rather than 0 is given as the lowest score for each item, a patient can not score lower than 30 for the total PANSS score. Scores are often given separately for the positive items, negative items, and general psychopathology. In their original publication on the PANSS scale, Stanley Kay and colleagues tested the scale on 101 adult patients (20-68 years-old) with schizophrenia[4] and the mean scores were, Positive scale = 18.20Negative scale = 21.01General psychopathology = 37.74Based on meta-analytic results, an alternative five-factor solution of the PANSS was proposed with positive symptoms, negative symptoms, disorganization, excitement, and emotional distress.[7] Brief Psychiatric Rating Scale (BPRS)Diagnostic classification and rating scales used in psychiatryScale for the Assessment of Negative Symptoms (SANS)Scale for the Assessment of Positive Symptoms (SAPS)^ Liechti, Stacy; Capodilupo, Gianna; Opler, Douglas J.; Opler, Mark; Yang, Lawrence H. (2017-12-01). "A Developmental History of the Positive and Negative Syndrome Scale (PANSS)". Innovations in Clinical Neuroscience. 14 (1112): 1217. 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"The five-factor model of the Positive and Negative Syndrome Scale II: A ten-fold cross-validation of a revised model". Schizophrenia Research. 85 (13): 280287. doi:10.1016/j.schres.2006.03.021. ISSN0920-9964. PMID16730429. S2CID9097109.The positive and negative syndrome scale (PANSS) for schizophrenia.The PANSS InstituteRetrieved from " Positive and Negative Syndrome Scale (PANSS) is a specialized diagnostic tool developed to evaluate the severity of symptoms in individuals with schizophrenia and related mental health conditions. Since its introduction in 1987, the PANSS has become a cornerstone in psychiatric assessments, offering healthcare professionals a structured approach to measure both positive symptoms (such as hallucinations and delusions) and negative symptoms (such as social withdrawal and lack of motivation) associated with schizophrenia. Additionally, the scale assesses general psychopathology, including symptoms like anxiety and depression, providing a comprehensive overview of a patients mental health.This article explores the PANSS assessment, its significance in diagnosing and managing schizophrenia, and why it is considered one of the most reliable tools for tracking psychiatric symptoms. Whether you are a patient, caregiver, or someone seeking to understand mental health evaluation tools, this guide will present the PANSS scoring system in a clear and empathetic manner. By the end, you will have a better understanding of how this tool supports clinicians in creating effective treatment plans and monitoring progress over time.What is the Positive and Negative Syndrome Scale (PANSS)?The Positive and Negative Syndrome Scale (PANSS) is a clinical tool designed to assess the severity and range of symptoms associated with schizophrenia. It is widely used in psychiatric settings to evaluate three primary categories of mental health symptoms:Positive Symptoms: These are symptoms that add to a persons mental state, such as hallucinations, delusions, and disorganized thinking.Negative Symptoms: These involve a reduction or absence of normal functions, such as diminished emotional expression, reduced social engagement, and lack of motivation.General Psychopathology: This category includes other mental health symptoms, such as anxiety, depression, and cognitive impairments.The PANSS test consists of 30 items, each rated on a scale from 1 (absent) to 7 (extreme). These items are divided into seven positive symptom items, seven negative symptom items, and 16 general psychopathology items. The evaluation is conducted through a structured clinical interview, during which a trained mental health professional observes and interacts with the patient to gather detailed insights into their symptoms.What sets the PANSS apart from other mental health evaluation tools is its ability to provide a nuanced understanding of a patients condition by quantifying symptom severity across multiple domains. This allows clinicians to identify specific areas of concern and tailor treatment plans to address them effectively. For patients, understanding the PANSS test can help demystify the diagnostic process and encourage a collaborative approach to their care.Why is the Positive and Negative Syndrome Scale (PANSS) Important?The Positive and Negative Syndrome Scale (PANSS) is a critical tool in mental health care, particularly for diagnosing and managing schizophrenia. Schizophrenia is a complex condition that manifests differently in each individual. The PANSS assessment provides clinicians with a detailed understanding of a patients unique symptom profile, which is essential for developing effective treatment strategies.One of the key strengths of the PANSS is its ability to measure both positive and negative symptoms. Positive symptoms, such as hallucinations and delusions, often require different treatment approaches compared to negative symptoms, like social withdrawal or lack of motivation. By distinguishing between these symptom types, the PANSS ensures that no aspect of a patients condition is overlooked.Additionally, the PANSS scoring system offers a standardized method for tracking changes in symptoms over time. This is particularly valuable for assessing the effectiveness of treatments, such as medications or psychotherapy. For example, if a patients PANSS score shows significant improvement in negative symptoms after starting a new medication, this data can guide future treatment decisions.Beyond individual care, the PANSS is also widely used in research settings. It plays a pivotal role in clinical trials, helping to evaluate the efficacy of new treatments or diagnostic tools for schizophrenia. This contributes to a deeper understanding of the condition and advances care for future patients.For patients and caregivers, the PANSS test provides a structured framework to better understand the complexities of schizophrenia. By categorizing symptoms into measurable domains, it offers clarity and reassurance during what can often be a challenging time. Ultimately, the PANSS is more than just a diagnostic toolit serves as a bridge between patients and clinicians, fostering improved communication and more personalized care.What Does the Positive and Negative Syndrome Scale (PANSS) Diagnose?The Positive and Negative Syndrome Scale (PANSS) is a widely recognized psychiatric evaluation tool used to assess the severity of symptoms in individuals with mental health conditions, particularly those involving psychosis. While it is most commonly associated with schizophrenia, the PANSS also has applications in diagnosing and monitoring other psychiatric disorders. Before exploring specific conditions, it is important to understand how the PANSS works and the significance of terms like positive and negative predictive values.Positive predictive value (PPV) refers to the likelihood that a person who tests positive for a condition actually has the condition. Conversely, negative predictive value (NPV) indicates the likelihood that a person who tests negative truly does not have the condition. These metrics are essential for evaluating the accuracy and reliability of diagnostic tools like the PANSS. For instance, a PPV of 85% means that 85 out of 100 individuals who test positive are correctly diagnosed, while an NPV of 90% means 90 out of 100 individuals who test negative are accurately identified as not having the condition.Below, we examine the mental health conditions that the PANSS can help diagnose and monitor, along with how the scale enhances understanding and management of these disorders.SchizophreniaSchizophrenia is a chronic mental health condition characterized by disruptions in thought processes, perceptions, emotions, and behaviors. Symptoms are typically categorized as positive (e.g., hallucinations, delusions) and negative (e.g., social withdrawal, lack of motivation). The PANSS assessment is widely regarded as the gold standard for measuring the severity of these symptoms.The PANSS scoring system evaluates 30 items across positive symptoms, negative symptoms, and general psychopathology. For schizophrenia, the tool demonstrates a high PPV of approximately 88% and an NPV of 91%, making it a reliable measure for both diagnosis and symptom tracking. By identifying specific symptom clusters, clinicians can tailor treatment plans, such as adjusting antipsychotic medications or incorporating cognitive-behavioral therapy (CBT).Schizoaffective DisorderSchizoaffective disorder is a complex condition that combines symptoms of schizophrenia with features of mood disorders, such as depression or mania. Patients may experience hallucinations, delusions, and significant mood swings. Diagnosing this condition requires careful differentiation from schizophrenia and mood disorders.The PANSS test is particularly effective in assessing the psychotic features of schizoaffective disorder. By evaluating positive and negative symptoms, as well as general psychopathology, the PANSS helps clinicians determine whether psychotic symptoms persist outside of mood episodesa key diagnostic criterion. The scale demonstrates a PPV of 83% and an NPV of 89% for schizoaffective disorder, ensuring accurate identification and effective management of this challenging condition.How is the Positive and Negative Syndrome Scale (PANSS) Performed?The Positive and Negative Syndrome Scale (PANSS) is a structured clinical tool designed to evaluate the severity of symptoms in individuals with schizophrenia and related disorders. Administered by a trained mental health professional, such as a psychiatrist or psychologist, the assessment combines direct observation with an in-depth patient interview. Below is a step-by-step overview of how the PANSS evaluation is conducted:Step 1: Preparation for the PANSS AssessmentBefore beginning the PANSS assessment, your healthcare provider will explain its purpose and outline what you can expect during the process. This is an excellent opportunity to ask any questions or share concerns you may have. While no specific preparation is required, reflecting on your recent symptoms, emotions, and behaviors can help you provide more accurate and meaningful responses during the interview.In addition, your provider may review your medical history, current medications, and past mental health evaluations. This background information allows them to better understand your condition and tailor the PANSS assessment to your unique needs.Step 2: The Interview ProcessThe PANSS assessment consists of 30 items divided into three categories: positive symptoms (e.g., hallucinations, delusions), negative symptoms (e.g., social withdrawal, lack of motivation), and general psychopathology (e.g., anxiety, depression). Each item is rated on a scale from 1 (absent) to 7 (extreme). To evaluate these symptoms, your healthcare provider will ask questions such as:Have you experienced hearing or seeing things that others cannot?Do you find it difficult to express emotions or engage socially?How has your mood been over the past week?Throughout the interview, the provider will carefully observe your behavior, speech patterns, and emotional responses. They may ask follow-up questions to clarify or expand on your answers. The interview typically lasts between 45 and 60 minutes, although the duration may vary depending on individual circumstances.Step 3: Scoring and AnalysisAfter completing the interview, the healthcare provider will use the PANSS scoring system to calculate your total score, as well as subscale scores for positive, negative, and general symptoms. These scores provide a detailed picture of symptom severity and help guide treatment decisions.Its important to understand that the PANSS assessment is not a standalone diagnostic tool. Instead, it is one of several methods used to evaluate schizophrenia symptoms and monitor treatment progress. Your provider will integrate the PANSS results with other diagnostic information to develop a comprehensive care plan tailored to your needs.Understanding Positive and Negative Syndrome Scale (PANSS) ResultsThe results of the PANSS assessment are presented as numerical scores that reflect the severity of your symptoms. These scores are categorized as follows:Positive Symptoms: This score measures symptoms such as hallucinations, delusions, and disorganized thinking. Higher scores indicate more severe positive symptoms.Negative Symptoms: This score evaluates symptoms like reduced emotional expression, social withdrawal, and lack of motivation. Higher scores suggest greater impairment in these areas.General Psychopathology: This score assesses overall psychological distress, including anxiety, depression, and cognitive difficulties.The total PANSS score is the sum of all 30 items, providing an overall measure of symptom severity. For example:A total score of 5875 may indicate mild symptoms.Scores between 7695 suggest moderate symptoms.Scores above 95 often reflect severe symptoms requiring immediate intervention.Discuss your PANSS results with your healthcare provider to understand what they mean for your specific situation. They can explain how your scores compare to baseline measurements (if applicable) and recommend any necessary adjustments to your treatment plan.What Happens Next?Based on your PANSS scores, your provider may recommend various follow-up actions, such as:Medication Adjustments: If your symptoms are not well-controlled, your provider may modify your current medications or prescribe new ones.Therapy: Psychotherapy, such as cognitive behavioral therapy (CBT), can help address both positive and negative symptoms.Support Services: Referrals to social workers, support groups, or vocational training programs may assist in improving daily functioning and quality of life.Remember, the PANSS assessment is a tool designed to guide your care. Open and honest communication with your provider ensures that your treatment plan aligns with your needs, goals, and preferences.Limitations and Risks of the PANSS AssessmentWhile the Positive and Negative Syndrome Scale (PANSS) is a valuable tool for evaluating schizophrenia symptoms, it has certain limitations and risks. Being aware of these can help you feel more informed and prepared for the process.Limitations of the PANSS AssessmentThe accuracy of the PANSS test can be influenced by several factors, including:Patient Communication: Difficulty expressing thoughts or emotions may affect the clarity and completeness of responses.Observer Bias: The providers interpretation of symptoms may vary depending on their training and experience.Snapshot in Time: The assessment reflects symptoms at the time of the interview and may not capture changes or fluctuations over time.Despite these limitations, the PANSS remains one of the most widely used and respected tools for assessing schizophrenia symptoms, offering valuable insights into symptom severity and treatment needs.Risks and PrecautionsThe PANSS assessment is non-invasive and carries no physical risks. However, discussing symptoms of schizophrenia or related conditions can sometimes feel emotionally challenging. You may experience feelings of vulnerability or distress when describing your experiences.Your healthcare provider is trained to create a supportive and compassionate environment during the assessment. If you feel overwhelmed at any point, let them knowthey can pause the interview or provide additional support. If the evaluation reveals severe symptoms, your provider will take immediate steps to ensure your safety, such as arranging urgent care or hospitalization if necessary.By understanding the limitations and potential emotional challenges of the PANSS assessment, you can approach the process with confidence, knowing it is a safe and effective tool for guiding your mental health care.Understanding the Importance of the Positive and Negative Syndrome Scale (PANSS)The Positive and Negative Syndrome Scale (PANSS) is a vital tool for assessing the severity of schizophrenia symptoms and shaping effective treatment plans. By evaluating positive symptoms (such as hallucinations or delusions), negative symptoms (like reduced emotional expression or social withdrawal), and general symptoms, the PANSS provides a thorough picture of an individuals mental health. This comprehensive approach allows healthcare providers to develop personalized care strategies tailored to your unique needs.How the PANSS Test Supports Mental Health CareThe PANSS assessment is one of the most widely recognized tools for evaluating schizophrenia symptoms. It not only helps measure psychiatric symptoms but also plays a pivotal role in diagnosing schizophrenia. By interpreting PANSS scores, mental health professionals can monitor the effectiveness of treatments and make necessary adjustments to optimize outcomes. This ensures that care remains responsive and aligned with your progress.Why Choose Telemedicine for Your PANSS Evaluation?Our online urgent care and primary care practice is committed to supporting you on your mental health journey. If youre experiencing symptoms of schizophrenia or need a mental health evaluation, our compassionate team is here to help. Through telemedicine, we make it easy and convenient to access tools like the PANSS test, allowing you to receive care and assessments from the comfort and privacy of your home.Take the First Step Toward Better Mental HealthWhether youre looking for a comprehensive psychiatric evaluation or want to explore how the PANSS scale can enhance your mental health care, our team is ready to assist. Schedule a telemedicine appointment today and take the first step toward achieving better mental health and well-being.